Future Leaders' Views on Organizational Culture

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Abstract

Research libraries will continue to be affected by rapid and transformative changes in information technology and the networked environment for the foreseeable future. The pace and direction of these changes will profoundly challenge libraries and their staffs to respond effectively. This paper presents the results of a survey that was designed to discern the perceptions and preferences of future library leaders related to organizational cultures in these times of precipitous change. The study finds that future leaders of academic libraries perceive a significant gap between their current and preferred organizational cultures, and that current organizational cultures limit their effectiveness.

Background

Libraries have been affected by disruptive technologies for the past decade or more, but have been insulated from major changes by stable budgets and an academic culture that is conservative with respect to change. Just as disruptive technologies have dramatically reshaped other industries, the full force of the changes brought about by Google, Amazon, Wikipedia, and many smaller innovators is now being felt in all types of libraries. David Lewis explored Christensen's theories about the effects of these

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disruptive technologies ("The Innovator's Dilemma") in relation to academic libraries.[1] Libraries have been effective at embracing sustaining technologies (technologies that enable us to do the same things for the same users) but are more challenged by disruptive technologies (technologies that do very new things and for new users). Lewis describes how libraries are facing disruptive technologies in all core aspects of library practice--collections, bibliographic control, and reference. Change in our organizational cultures is central to whether libraries will be able to adapt; the challenge is "to create an organizational culture that embraces the disruptive change and rewards those who harness it to serve the library's users."[2]

At the same time, a generational change in attitudes toward technology is witnessed in library users. The library literature is rich with research about the so-called Millennials, a generation whose relationships to technology, and whose social structures and work patterns, are different than any preceding generation. Millennials are known for a preternatural ability to adopt new information technologies, for shifting social and cultural expectations seen in collaborative work models, and for an appetite for open access to information.

In early 2008, the Council on Library and Information Resources convened a meeting of library leaders to discuss the topic of reconceiving research libraries for the 21st

century.[3] Central to achieving this goal is fostering organizational cultures that support more risk-taking. "There is a cost to not taking risk—a danger that libraries will become stuck in a niche that becomes smaller and smaller."[4] Many of the recommendations called for libraries, as well as universities, to be more externally focused. Both risk-taking and repositioning the library within the parent organization are directly related to organizational culture. Re-envisioning the entire organization in order to remain viable is not a natural, or comfortable, position for librarians. The transformation will not occur without strong leadership, and must take place during a period in which a significant percentage of the current workforce will retire.

There is no doubt that the ability of the library to be effective and transform itself lies in the people who work there. While the profession acknowledges an imperative to realign skills in the library workforce, making it so is a long-term goal that will likely be implemented only gradually. It is therefore particularly urgent that, in the near term, libraries nurture the talents of those who show the most leadership potential and are already working in libraries. Current library leadership should be cognizant of the fact that these “future leaders” have other options in the marketplace. If they do not feel that they can make a positive contribution in their library, they will leave, and, with them may go much of the hope to bridge library organizations into a viable future.

Perspectives on Organizational Culture and Effectiveness

Organizational culture can be defined as a set of values and beliefs that members of an organization share, as well as implicit, taken-for-granted belief structures.[5] Organizational culture both guides and constrains the behavior of members of a group. It is a vehicle for change but also an outcome, "both the means and ends of organizational change efforts."[6] It also stands at the center of leadership. Culture defines and creates leaders; "leadership and culture are two sides of the same coin."[7] At the same time, real leaders step outside the culture that shaped them and in which they find themselves. They have the ability to recognize changes in the external environment that necessitate internal change and are able to lead an adaptation of their own organization's culture to meet new challenges.

A variety of frameworks exist to assess organizational culture and effectiveness, ranging from models that focus on a particular dimension of an organization (e.g., human relations, open systems, internal process, rational goal) to more complex typologies.[8] One framework of the latter type is the Competing Values Framework (CVF). The CVF seeks to express the underlying values in an organization and how those values can be applied to the process of organizational change. Developed from research on major indicators of effective organizations, the CVF is a multidimensional model that describes four distinct culture types: Clan, Adhocracy, Hierarchy, and Market.[9] The four culture types have roots in, and have been shown to be congruent with, other frameworks,

including single-variable models (Clan=human relations; Adhocracy=open systems; Hierarchy=internal process; Market=rational goal) and Jung/Myers and Briggs (Clan=feeling; Adhocracy=intuiting; Hierarchy=thinking; Market=sensing).[10]

Clan (also referred to as Collaborate[1]) is characterized by teamwork and employee development; in a Clan/Collaborate culture, a major task of management is to empower employees and facilitate their participation, commitment and loyalty. Adhocracy (Create) is characterized by innovation and rapid response to change; a major task of management in an Adhocracy/Create culture is to foster entrepreneurship, creativity, and adaptability. Hierarchy (Control) values include stability, clear lines of authority, standardized rules and procedures and accountability; the role of management in a Hierarchy/Control culture is to maintain consistency in products and services. Market (Compete) values are oriented toward the external environment and emphasize competitiveness and productivity; the role of management in a Market/Compete culture is to effectively respond to external market mechanisms to increase the organization's productivity, results and profits.[12]

The Competing Values Framework groups measures of organizational effectiveness along two dimensions: internal vs. external focus, and high vs. low flexibility. The four quadrants created by these intersecting axes define the core cultural types (see Figure 1).

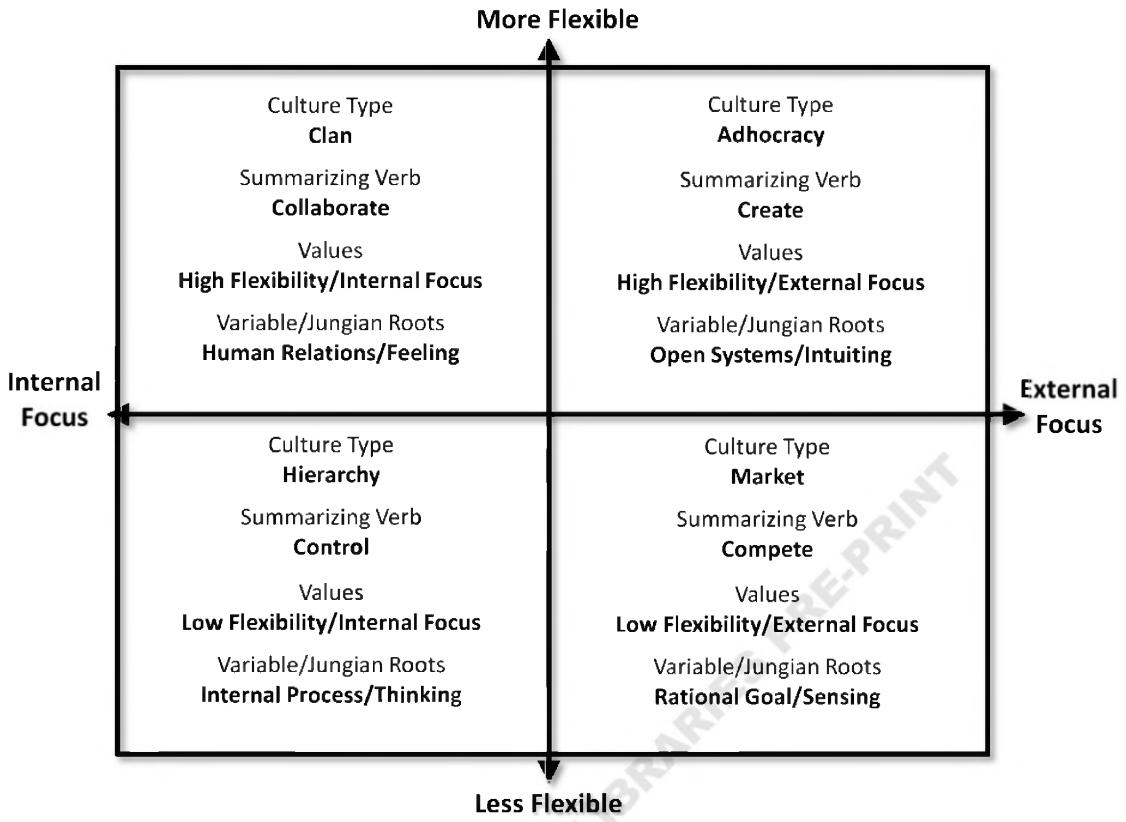

Figure 1. Elements of the Competing Values Framework

While the CVF can be used as a tool to measure organizational effectiveness and success, it can do so only in the context of a given organization's cultural profile and lifecycle stage. In other words, while industries may have a typical profile or there may be a profile typical of young versus mature organizations, there is no ideal profile. The CVF allows an organization to be described by the degree to which it adheres to each of the four culture types. Most organizations have some characteristics of each of the organizational types. Thus, one of the challenges of employing the CVF as a tool for organizational change is accepting the apparent contradictions inherent in the model.

According to Quinn and Cameron, this is, in fact, the model's strength; the CVF reveals "the inherent paradoxes in effectiveness."[13] In contrast, frameworks that do not account for paradox can hide them, and hence their potential explanatory value, within averages and linear trends. As an example of this paradox, it has been shown that Clan culture values support more innovation and risk-taking, values that are also associated with the Adhocracy culture type.[14] In a study of colleges facing a major crisis, Cameron found that those that survived simultaneously exhibited entrepreneurial, innovative behaviors (Adhocracy values) *and* conservative, near-term survival-focused behaviors (Hierarchy values).[15]

Several organizational culture profiles can emerge from use of the CVF framework. In a *congruent culture*, one culture type dominates most aspects of the organization (e.g., leadership, management, strategic emphases, criteria of success). In a *strong culture*, one cultural type (i.e., quadrant) is dominant. In a *balanced culture*, an organization shows capabilities in all four cultures. Congruency or strength of culture is not necessarily associated with organizational success and, while associated with success, a balanced culture is not required for organizational success; what it indicates is evidence of capacity in an organization to shift emphases when necessary.[16] In a study of 334 institutions of higher education, Cameron found that neither strong nor congruent cultures were strong predictors of organizational effectiveness,[17] although he notes in discussing the results of that study that congruency of culture is more likely to be

associated with unit performance than overall performance in a large, complex organization such as a university.[18]

The Competing Values Framework has seen some application in libraries. Kaarst-Brown et. al. highlighted the use of the CVF as a diagnostic tool.[19] Faerman stressed its utility for examining "the inherent paradoxes and contradictions of organizational life" and emphasized that libraries will be successful as user-centered organizations only when they can become aware of the need for balance across cultural values, and recognize that conceptual opposition between cultural types does not mean that the those cultural types cannot co-exist.[20] Varner stressed the utility of the CVF in the diagnostic stage of organizational change, as it enabled library staff both to discover and to make visible their organization's underlying assumptions.[21] That the CVF is not premised on a problem is also a strength, he noted, as is its underlying philosophy that effectiveness contains contradictory measures of success and evolves over the lifecycle of an organization. In a recent application in the academic library context, Shepstone and Currie used the CVF to examine the current and preferred organizational cultures at the University of Saskatchewan Library as part of a larger strategic planning process.[22] They found a significant gap between current and preferred cultures, and differences between longer-term and newer librarians. The results of their assessment, in combination with results from strategic planning, served as the basis of a roadmap for specific actions for change.

A study of future library leaders

The study described here was undertaken to better understand individual perceptions of the current and preferred organizational cultures, and to assess whether there was a relationship between future library leaders' satisfaction with their organizational cultures and their perception of their own effectiveness. More specifically, the study was designed to test the following four hypotheses.

Hypothesis 1: Future leaders are not satisfied with their libraries' current organizational culture. They want a culture that is more externally focused and more flexible.

Hypothesis 2: Future leaders believe that their libraries' current organizational structures and processes limit their ability to be effective.

Hypothesis 3: Future leaders feel more effective in libraries that are more flexible and externally focused.

Hypothesis 4: Dissatisfaction with the organizational culture will cause future leaders to consider leaving academic research libraries.

Methodology

The Sample

For the purpose of this study, future library leaders were defined as individuals who are: a) making strong contributions to their organization's visioning and strategic planning; b) demonstrating innovative practices; and c) in the earlier stages of their careers. The purposive sample was developed by broadly soliciting nominations for subjects meeting these "future leaders" criteria from associate directors and associate university librarians across the United States. Additional subjects were identified from recent participants in competitive academic library leadership programs, such as those offered by the ARL and the Frye Institute. Two hundred and forty nominations were received, representing individuals at 93 academic libraries of all sizes (but with the majority coming from ARL libraries).

The Survey Instrument and Study Measures

The self-reporting survey instrument (see Appendix 1) consisted of fifteen questions organized into five sections: Predicting the Future, Changing Role of the Library, Your Library's Culture, Your Preferences and Experience, and Your Future in Libraries. Additional questions were included to collect demographic information, including position area, position level, length of time working in libraries, length of time in current position, age, gender, and level of professional activity.

The first section, Predicting the Future, contained three questions that were taken from the Taiga 1 Provocative Statements[2] (Appendix 1, Questions 1-3). These questions did

not directly pertain to the study's hypotheses, but, rather, were designed as an "ice breaker" to encourage respondents to feel free to express their opinions in the remainder of the survey. Section 2, Changing Role of the Library, requested open-ended narrative responses, which were not used in the analyses described here.

To test Hypothesis 1, two dimensions of organizational culture, dominant characteristics and management style, were selected from the standard Competing Values Framework instrument, the Organizational Culture Assessment Instrument.[3] For each dimension, respondents were asked to assess the degree to which a series of four statements (one for each culture type: Clan, Adhocracy, Hierarchy, Market) matched their perception of their current and preferred organizational culture and management style (Appendix 1, Questions 8-11). The sixteen responses (four each for current and preferred dominant characteristics and current and preferred management style) were used to measure future leaders' perception of the levels of Clan, Adhocracy, Hierarchy and Market culture types in their current and preferred organizations. Respondents' levels of satisfaction would be derived by calculating the difference between the current and preferred responses for each culture type for both of the dimensions.

Responses to the question about the impact of the organizational structures and management style on respondents' effectiveness (Appendix 1, Question 12) would be analyzed as the dependent variable to test Hypothesis 2. The responses to this question would also be used as an independent variable to test Hypothesis 3, which predicted

that respondents feel the most effective working in organizations that are more externally focused and flexible.

Hypothesis 4 predicted a relationship between the degree to which subjects feel dissatisfied with their library's processes and structures and the likelihood that they will continue working in libraries. To test Hypothesis 4, subjects were asked to provide the likelihood that they will be working in libraries in the next 5 years (Appendix 1, Question 14).

Administering the Survey

The survey was developed and administered August through October, 2008. The initial instrument was reviewed by survey experts in the authors' own institutions, which resulted in minor changes. This was followed by a pilot survey that was sent to ten members of the sample population. Based on input from this group, the survey was modified. (Results from this initial pilot are not included in the analysis.) To validate the final instrument, the survey was sent to ten additional members of the sample population. Upon acceptance of this version of the instrument, an invitation to complete the survey was sent to the remaining 220 members of the sample (see Appendix 2). Respondents were offered the opportunity to win a $100 Amazon gift certificate for participation in the survey. No identifying information was stored with responses. A reminder was sent one week after the initial invitation.

Results

There were 177 responses to the survey. Twelve respondents did not progress past the first page, resulting in 165 valid responses, a 72% response rate. Respondents' high level of engagement is indicated both by the response rate and by the fact that 93% answered one or more of the optional open-ended questions.

Sample Characteristics

The majority of the respondents (70%) were between 30 and 40 years of age. The next largest group (17%) were respondents between 41 and 50 years of age. A smaller number of respondents were under 30 (9%) and even fewer were over 50 (4%). The majority of respondents were female (63%).

Respondents came from all areas of the library. The largest groups were from technology/emerging services (30%), public services (22%) and liaisons/subject specialists (19%). Other groups were also represented including technical services (13%), collections/scholarly communication (6%), administration (6%), and special collections/archives/preservation/conservation (5%).

A large number of respondents had some supervisory experience as a director or branch head (2%), assistant or associate director (3%), department head (30%) or unit head

(12%). An additional 11% described themselves as coordinators, 2% as IT Specialists. The largest group was the group that described themselves as librarians (41%).

Respondents were fairly evenly distributed among groups in how long they worked in libraries with 29% working 0 to 5 years; 37% working 6 to 10 years and 34% working over 10 years in libraries. However, the majority of respondents had been in their current positions for a short time. Ninety-one percent were in their positions 0 to 5 years, 7% were in their positions 6 to 10 years and only 2% were in their position more than 10 years.

Respondents were asked to provide information regarding several indicators of professional activity and involvement (Appendix 1, Question 15). These included traditional measures of success (e.g., publications and promotions) as well as newer measures (e.g., involvement in grant activity and web presence). Respondents indicated that they were involved in, on average, 5.7 of the 8 areas.

Hypothesis 1: Satisfaction with Organizational Culture

Hypothesis 1 predicted that future leaders are not satisfied with current organizational cultures and that they prefer a culture that is more externally focused and flexible. Large differences between responses for current and preferred cultures would indicate dissatisfaction.

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Responses to the questions related to current and preferred organizational culture dominant characteristics and management style dimensions were analyzed using paired t-tests. The data show significant differences for all four culture types for dominant characteristics (see Table 1) and significant differences for three of the four culture types (Clan, Adhocracy, and Hierarchy) for management style (see Table 2). These results indicate an overall lack of satisfaction with the organizational culture and provide support for Hypothesis 1.

DOMINANT CHARACTERISTICS DIMENSION OF ORGANIZATIONAL CULTURE				
	Current Mean, Std. Dev.	Preferred Mean, Std. Dev.	Paired t-test	Difference in Means
HIERARCHY	M=36.07, SD=23.86	M=12.93, SD=8.32	t(164)=-12.46, p<=0.001	-23.14
ADHOCRACY	M=20.97, SD=15.20	M=43.83, SD=15.16	t(164)=14.33,p<=0.001	22.86
CLAN	M=25.41, SD=18.09	M=22.55, SD=13.05	t(164)=-1.98, p<=0.050	-2.87
MARKET	M=17.55, SD=13.08	M=20.70, SD=11.97	t(164)=-2.75, p<=0.007	3.14

Table 1. Results of paired t-test analysis of current and preferred *dominant characteristics* of organizational culture.

MANAGEMENT STYLE DIMENSION OF ORGANIZATIONAL CULTURE				
	Current Mean, Std. Dev.	Preferred Mean, Std. Dev.	Paired t-test	Difference in Means
HIERARCHY	M=38.39, SD=24.57	M=11.37, SD=7.85	t(164)=-13.74, p<=0.001	-27.02
ADHOCRACY	M=15.98, SD=11.39	M=34.86, SD=12.25	t(164)=15.40,p<=0.001	18.88
CLAN	M=30.66, SD=17.59	M=37.29, SD=13.57	t(164)=4.47, p<=0.001	6.63
MARKET	M=14.98, SD=14.02	M=16.48, SD=10.92	not significant	1.50

Table 2. Results of paired t-test analysis of current and preferred *management style* dimension of organizational culture.

Figures 2 and 3 map the results of dominant characteristics and management style to the Competing Values Framework quadrants. The 'X' provides an axis on which the data are mapped with each hatch mark representing approximately 5 points (5%). Two points are plotted in each of the quadrants: one represents the mean value of responses about current organizational culture, the other represents the mean value of responses about preferred organization culture. The points are connected with lines to form a diamond shape. A long point on the diamond indicates a high value, while a short side indicates a low value. The figures provide a visual depiction of the data that can be useful in interpreting the results.

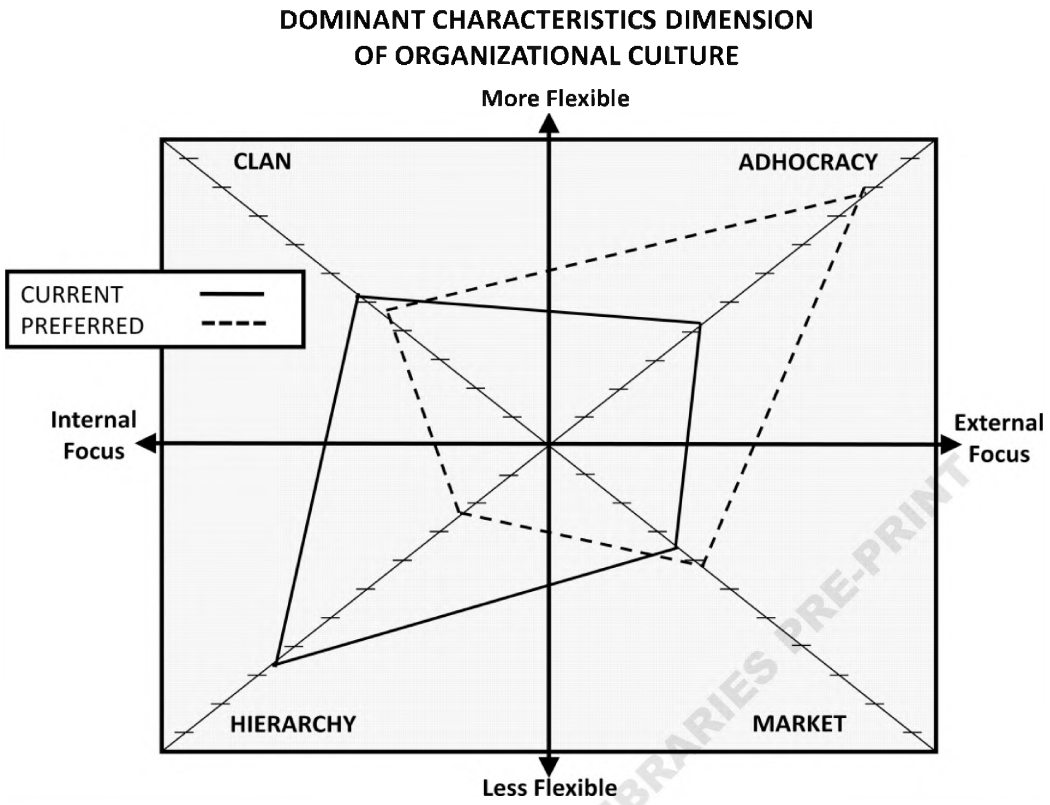

Figure 2. CVF representation of current and preferred *dominant characteristics* dimension of organizational culture.

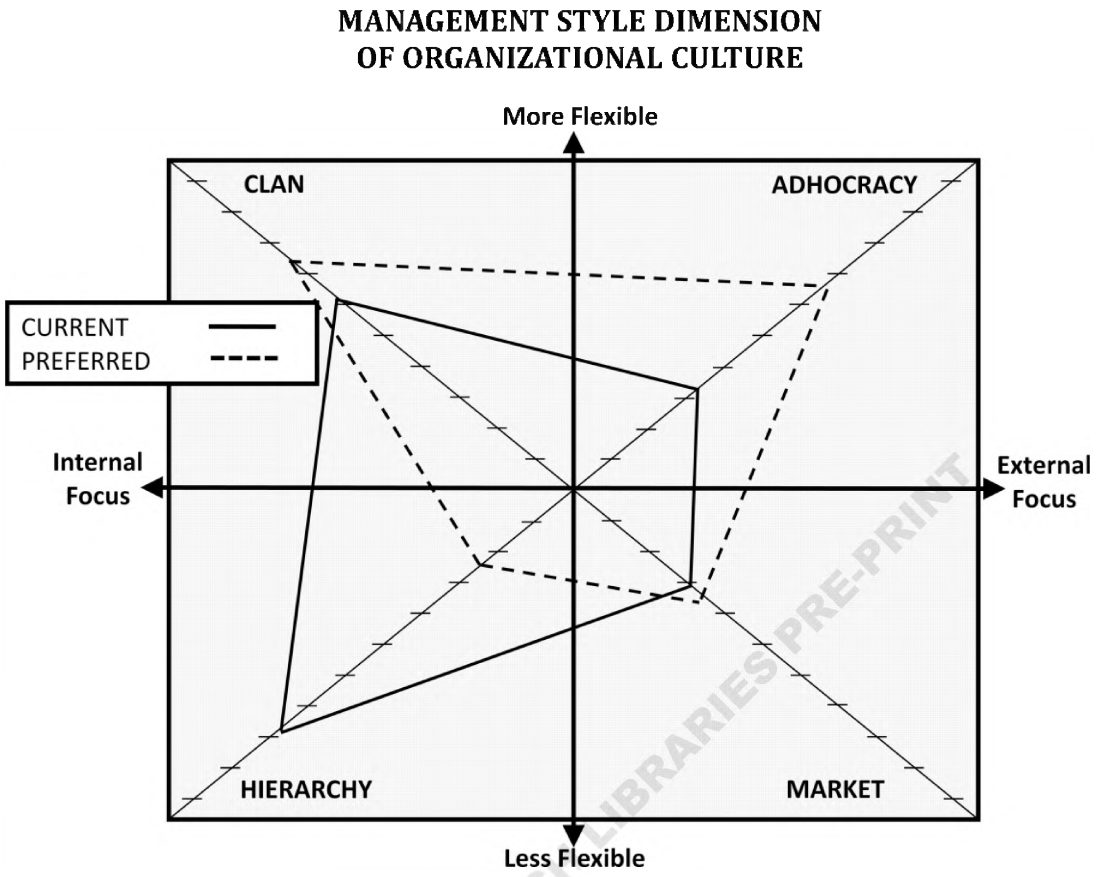

Figure 3. CVF representation of current and preferred *management style* dimension of organizational culture.

Hypothesis 1 further predicted that future leaders would prefer organizations with greater external focus and flexibility. The results support the hypothesis and are congruent for responses related to dominant characteristics and management style, showing a strong preference for a shift from Hierarchy to Adhocracy cultures. The largest differences were found in the shift away from Hierarchy (internal focus, low flexibility) with respondents preferring less Hierarchy in both dominant characteristics

(23 points) and management style (27 points). The opposing quadrant, the Adhocracy culture type, reflects a change similar in magnitude and, as predicted, in the opposite direction. Difference in responses for both dominant characteristics (23 points) and management style (19 points) indicate a shift towards a more flexible, externally focused organizational culture. This can be seen clearly in Figures 2 and 3 as the point of the diamond shifts from the lower left to the upper right. The shift in management styles shows an even stronger shift away from Hierarchy (27 points) but it is not completely a shift to Adhocracy. The shift away from Hierarchy is split between two culture types with the largest portion moving to Adhocracy (19 points) and a smaller portion moving towards Clan (7) and Market (2) management styles.

Although all the differences observed are statistically significant, the question remains as to whether the differences are operationally significant. Statistical significance indicates there is a very low probability that the difference is due to chance, and that an actual difference of the magnitude measured does exist. It does not indicate that that difference is operationally significant. As a guide to assessing operational significance, Cameron and Quinn suggest that organizations be especially sensitive to differences of 10 or more points (i.e., 10%) between the current and preferred organizational cultures.[24] Using this guideline, it is safe to assume that the large differences between the current Hierarchy culture in favor of the preferred Adhocracy culture have

operational significance. The magnitudes of the differences found for the Clan and Market culture types are small and so may not have operational significance.

Hypotheses 2 and 3: Effectiveness and Organizational Culture

Individual Effectiveness

To test Hypothesis 2, that future leaders feel that their own effectiveness is limited by their libraries' organizational structures and processes, responses to the related question (Appendix 1, Question 12) were analyzed. The results confirm hypothesis 2, showing that more than 85% of respondents said that their organizational structures and processes limited their impact or effectiveness either "somewhat" or "a lot" (they felt somewhat or a lot "thwarted," in short) (see Figure 4).

Figure 4. Level to which respondents felt they were thwarted by organizational structures and processes.

To test Hypothesis 3, that future leaders felt more effective in organizations that are more flexible and externally focused, analysis of the relationship between the perception of individual effectiveness and organizational culture was conducted. Subjects were grouped into one of three subsets based on their responses: not at all thwarted, somewhat thwarted, or a lot thwarted (i.e., thwarted was used a dependent variable). Differences in the current culture types reported by subjects were analyzed based on how hindered they felt by their current organizational structures. That is, the perceived level of the Hierarchy culture was compared between groups of subjects

responding that they felt their effectiveness was limited by organizational structures *not at all, somewhat*, and *a lot*. This analysis was repeated for Adhocracy, Clan and Market culture types for the dominant characteristics of organizational culture. All four analyses (Clan, Adhocracy, Hierarchy, and Market cultures) were then conducted for management style.

ANOVA was used to analyze differences in responses to the questions related to the dominant culture of the organization based on membership in the thwarted group. The data show significant differences among all groups (not at all thwarted, somewhat thwarted, and a lot thwarted) for the Hierarchy and Adhocracy culture types for both dominant characteristics and management style. The results are summarized in Tables 3 and 4; results of the post-hoc tests describing differences between group pairs are included in Appendix 3.

CURRENT DOMINANT CHARACTERISTICS DIMENSION OF ORGANIZATIONAL CULTURE by LEVEL OF IMPACT OF ORGANIZATIONAL STRUCTURES AND PROCESSES				
	not at all Mean, Std. Dev.	somewhat Mean, Std. Dev.	a lot Mean, Std. Dev.	ANOVA
HIERARCHY	M=14.62, SD=10.59	M=34.84, SD=22.20	M=46.48, SD=24.39	F(2)=16.41, p<=0.001
ADHOCRACY	M=38.10, SD=13.08	M=22.68, SD=13.98	M=11.46, SD=10.45	F(2)=34.40, p<=0.001
CLAN	M=31.19, SD=16.19	M=23.60, SD=14.38	M=26.19, SD=23.38	Not significant
MARKET	M=16.19, SD=9.34	M=18.88, SD=12.91	M=15.87, SD=14.49	Not significant

Table 3. Differences in *dominant characteristics* dimension grouped by level to which respondents feel hindered by organizational structures and processes.

CURRENT MANAGEMENT STYLE DIMENSION OF ORGANIZATIONAL CULTURE by LEVEL OF IMPACT OF ORGANIZATIONAL STRUCTURES AND PROCESSES				
	not at all Mean, Std. Dev.	somewhat Mean, Std. Dev.	a lot Mean, Std. Dev.	ANOVA
HIERARCHY	M=16.90, SD=10.18	M=34.39, SD=18.74	M=53.41, SD=28.29	F(2)=24.94, p<=0.001
ADHOCRACY	M=32.10, SD=10.06	M=17.36, SD=10.53	M=8.96, SD=8.09	F(2)=31.16, p<=0.001
CLAN	M=39.29, SD=16.68	M=32.17, SD=13.68	M=24.80, SD=21.68	F(2)=6.23, p<=0.002
MARKET	M=15.71, SD=11.97	M=16.09, SD=13.00	M=12.83, SD=16.23	Not significant

Table 4. Differences in *management style* dimension grouped by the level to which respondents feel hindered by organizational structures and processes.

Figures 5 and 6 graphically depict the results for the two culture types for which the findings were statistically significant: Hierarchy and Adhocracy. The data show that, when responding to the question regarding their library's current dominant organizational culture and management style, subjects who said that their individual effectiveness was "not at all thwarted" by organizational structures also said that their library had low levels of Hierarchy culture and high levels of Adhocracy culture. Conversely, the group of subjects responding that their individual effectiveness was "a lot thwarted" by organizational processes also said that their library had high levels of Hierarchy culture and low levels of Adhocracy culture. This supports the hypothesis that future leaders feel more effective in organizations that are more externally focused and more flexible and feel less effective in organizations that are internally focused and less flexible.

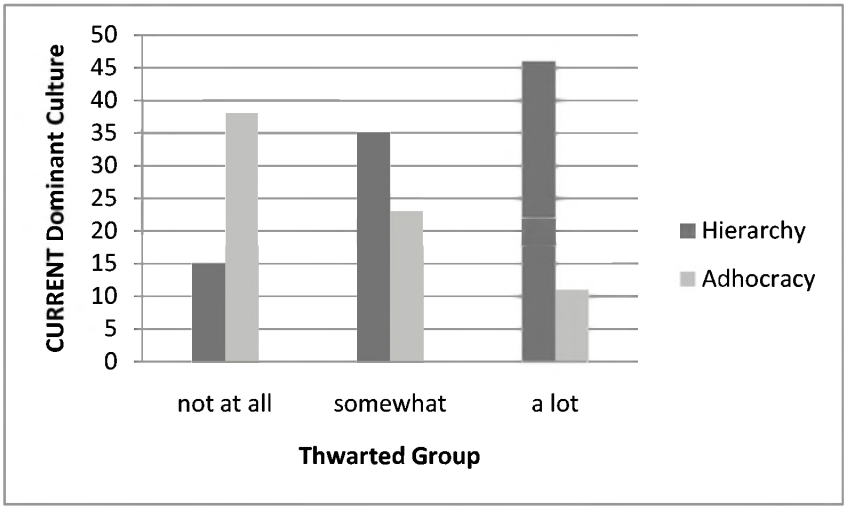

Figure 5. Responses to the OCAI question related to *dominant characteristics* grouped by the level to which respondents feel hindered by organizational structures and processes.

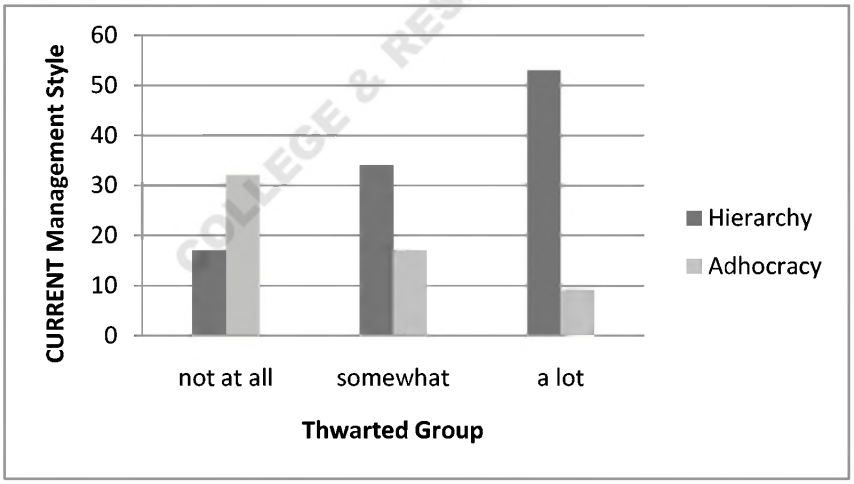

Figure 6. Responses to the OCAI question related to *management style* grouped by the level to which respondents feel hindered by organizational structures and processes.

Organizational Effectiveness

To provide additional perspective on the results, differences in responses to the OCAI questions regarding current and preferred organizational cultures between the "a lot thwarted" and the "not at all thwarted" groups were analyzed. Responses to the current and preferred organizational questions for these groups were contrasted to the overall current and preferred responses to see if different patterns of responses emerge. Figure 7 maps the "a lot thwarted" group to the CVF quadrants along with the responses for the entire group for *current* organizational culture. Figure 8 maps the "not at all thwarted" group to the CVF quadrants along with the responses for the entire group for *preferred* organizational culture. In both cases, the shapes are nearly identical, demonstrating that the preferred organization of the entire group is very similar to the responses of subjects who say that they are not hindered by organizational structures and processes. (Although not represented in figures, similar relationships exist for the management style dimension. See Table 4.)

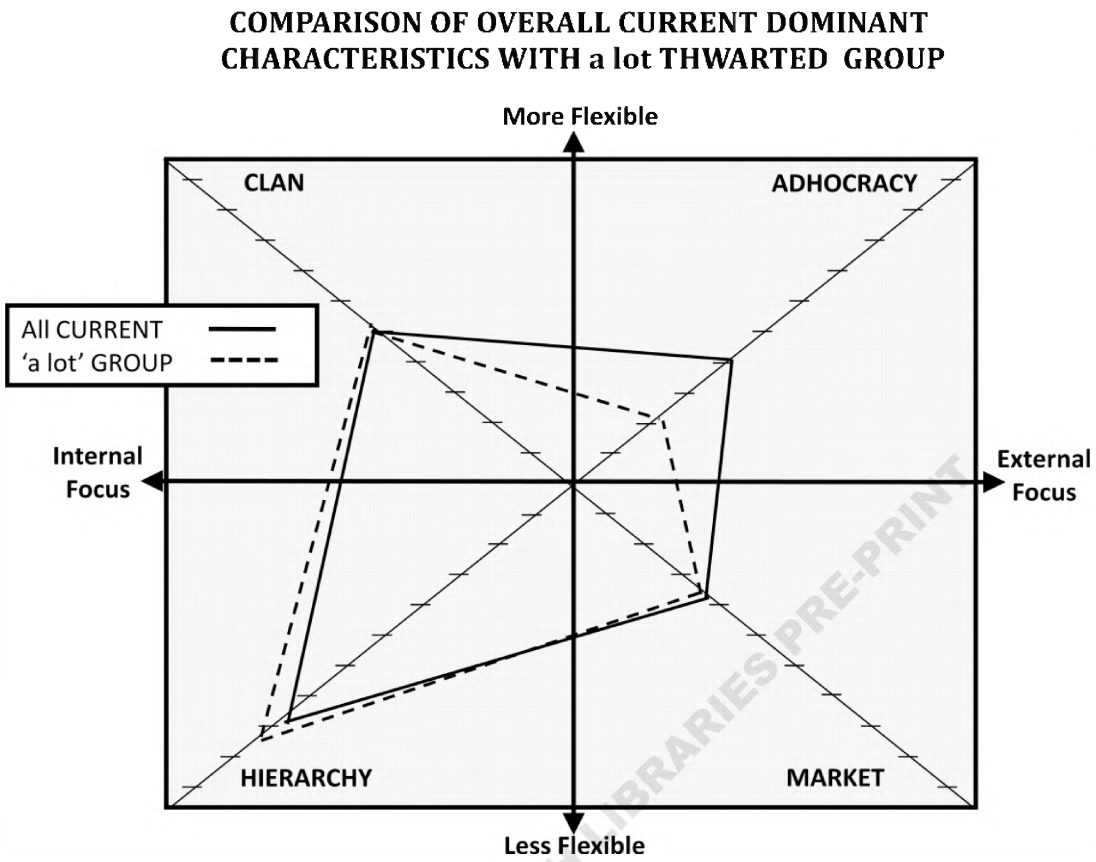

Figure 7. Current *dominant characteristics* of organizational culture for the entire sample with the "a lot thwarted" group.

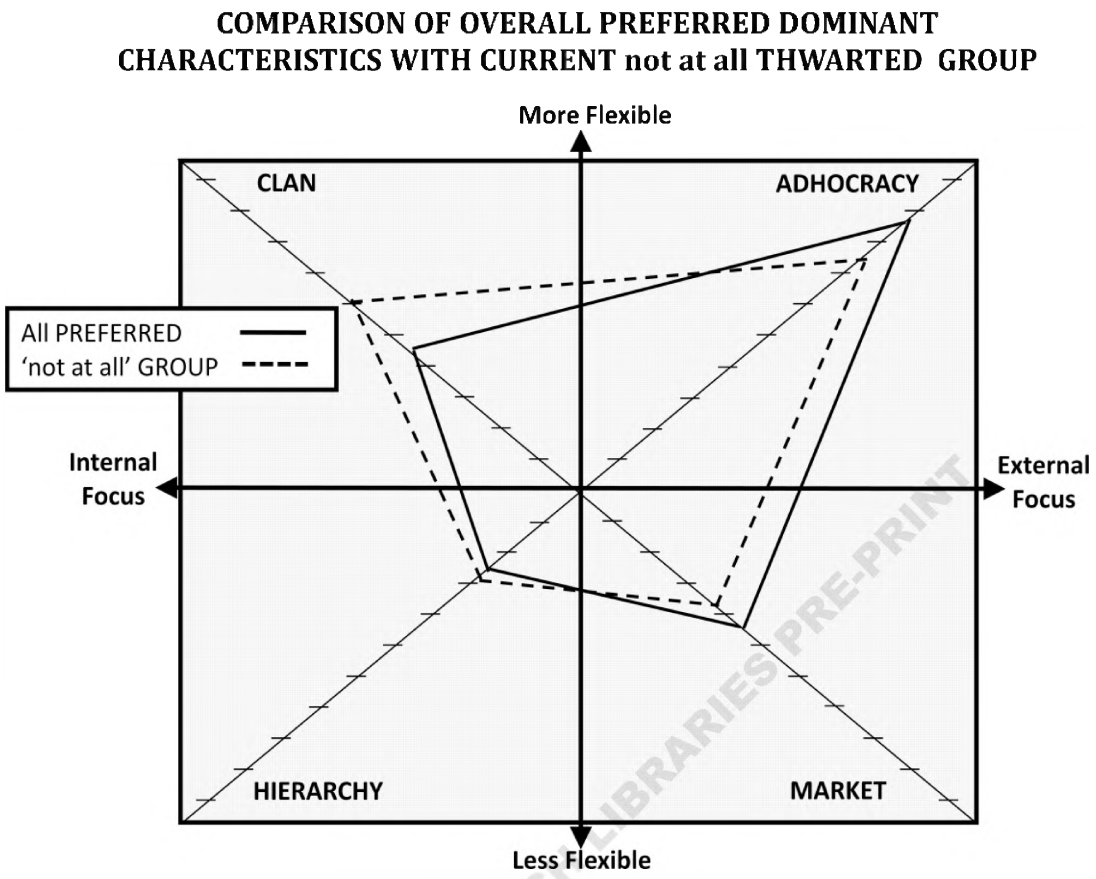

Figure 8. Preferred *dominant characteristics* of organizational culture for the entire sample with the "not at all thwarted" group.

Figure 9 maps the responses for the current dominant characteristics of organizational culture for the "a lot thwarted" group to the CVF quadrants along with the responses for the entire group to the OCAI question related to preferred organization. Unlike similarities between responses for current and preferred organizational cultures for the group that reported they were "not at all thwarted," there are marked differences

between respondents who feel they are "a lot thwarted" by organizational cultures and the overall preferred culture.

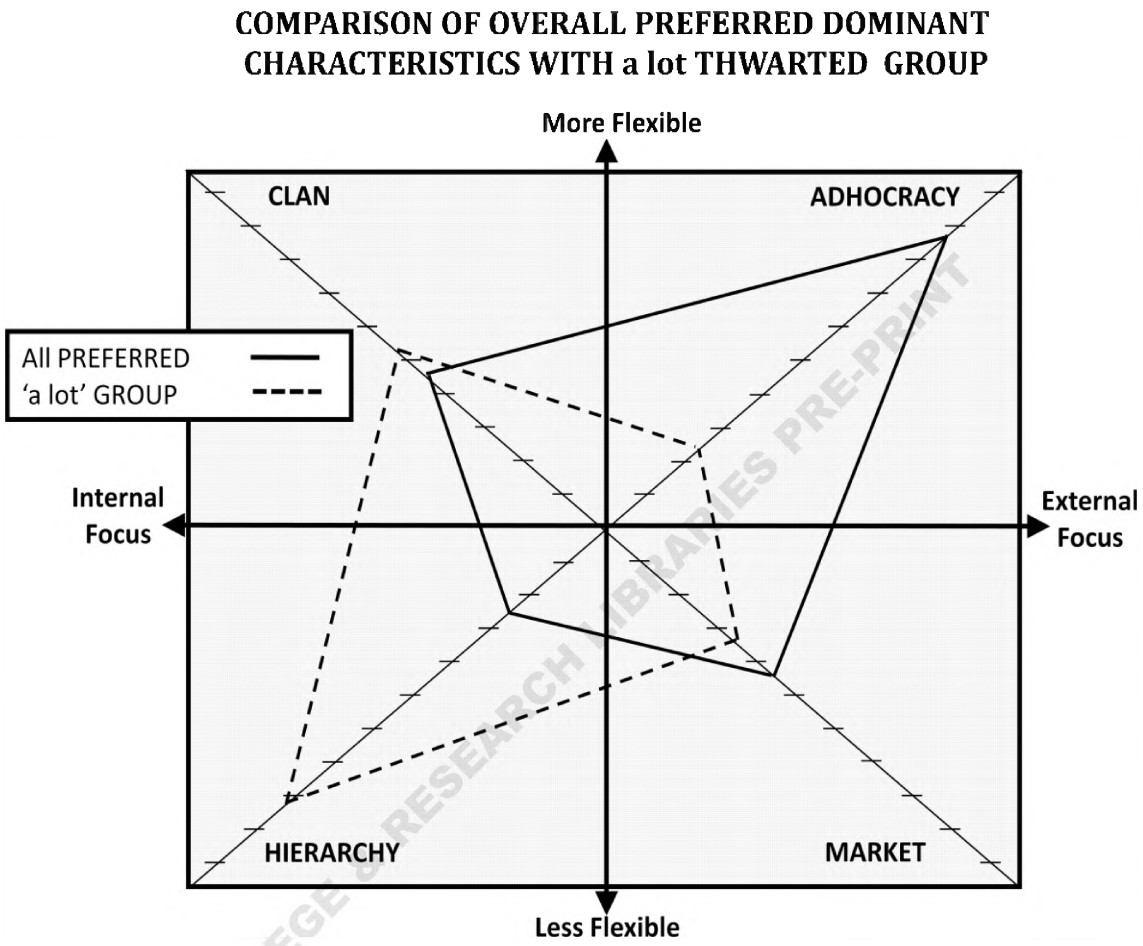

Figure 9. Preferred *dominant characteristics* of organizational culture for the entire sample with the current responses for the "a lot thwarted" group.

These data show that the organizational culture that is preferred generally is very similar to the current organizational cultures of those who feel they are not at all hindered by organizational structures, suggesting that the organizational culture profile

preferred by all respondents would be an environment in which all individuals would perceive themselves as more effective.

Hypothesis 4: Individual Future Plans in Libraries

To test Hypothesis 4, which predicts that dissatisfaction with the organizational culture will cause future leaders to consider leaving academic research libraries, responses to the question about the likelihood that subjects would be working in libraries in five years were analyzed (Appendix 1, Question 14). As with the test of Hypothesis 3, subjects were grouped into subsets based on the level at which they felt that they were thwarted by organizational structures (not at all, somewhat, a lot) and analysis was conducted to test for differences between the groups in the likelihood that subjects would be working in libraries in five years.

Table 5 summarizes the responses. Because the matrix is square and both measures are ordinal data, Kendall's tau-b analysis was used to determine if a statistically significant relationship existed between the responses to the questions. The data indicate a relationship (Kendall's tau-b = -2.170, $p<=0.001$) with the subjects reporting the most negative impact of organizational processes and structures most likely to say that it was unlikely or very unlikely that they would be working in a library in five years. Subjects reporting little negative impact of organizational process and structures were more

likely to respond that it was likely or very likely that they would be working in a library in five years.

To what extent do you feel your library's organizational structures and processes limit your effectiveness? ("Thwarted")	Academic research libraries are effectively meeting the needs of their users...			Total
	disagree or strongly disagree	neutral	agree or strongly agree	
not at all	3	4	14	21
sometimes	22	28	40	90
a lot	27	13	14	54
Total	52	45	68	165

Table 5. The relationship between "thwarted" and the likelihood of working in a library in five years.

There was no relationship detected between a person feeling thwarted and their interest in moving to a leadership position within the next five years. In addition, no relationship was found between the likelihood that a person would be working in a library in the next five years and their interest in moving into a leadership position in the next five years. The data indicate that some people have interest in leadership and, if not satisfied in the library setting, they may move elsewhere.

Summary of Findings

This study analyzed future library leaders' perceptions of the organizational cultures in which they currently work and compared them to the cultures that they would prefer.

A self-reporting survey was used to collect data from 165 respondents (a 72% response rate) who met the criteria of "future leader." The study employed the Competing Values Framework -- a model designed to assess organizational culture for effectiveness -- with the goal of better understanding how future academic library leaders perceive organizational culture.

While the study did not focus on or reveal the culture profile of individual institutions, it did shed light on an aggregate academic library profile (see Current in Figures 2 and 3). Viewed in the context of other industry profiles, the academic library profile has elements of all culture types (Clan, Adhocracy, Hierarchy and Market) but is dominated by the Hierarchy culture type. The gap between current and preferred cultures, as well as the degree to which future leaders feel thwarted by current cultures in their capacity to be effective, indicate that a more optimal library profile would show significantly less presence of the Hierarchy culture type and significantly greater presence of the Adhocracy culture type (see Preferred in Figures 2 and 3). The preferred culture, as perceived by this population, is more flexible and externally oriented than the current culture. The study also found that future leaders feel limited in their effectiveness and impact by their libraries' current organizational cultures, and that the more internally focused and less flexible their libraries are, the more thwarted they feel. Finally, the study found that future leaders who are most frustrated are the most likely to consider leaving libraries.

Discussion

Libraries face significant pressure to change due to paradigm shifts in the information environment, rapidly changing needs and expectations of users, and evolving requirements for the workforce that must respond to these challenges. Some libraries are responding effectively, and even boldly. Many are also coming to realize that the state of change itself will not cease or even slow. Rather, change may be expected to be a continuous state, and those libraries treating it as such are likely to be better prepared to respond to emerging opportunities (or threats) in the academy as well as from the external environment and marketplace. For academic libraries, fostering a culture of "continuous change" will require increasing agility, embracing innovation and experimentation, and approaching the unknown and the evolving with greater ease and sense of opportunity.

Effective senior leadership is essential to any organizational culture change. The people whom these current leaders depend upon to help their organizations to become successful -- the cohort of future leaders who were the focus of this study -- will be key to the longer-term success of change across organizations and the profession. That is, if they stay in libraries. The findings of this study reveal a significant gap between future leaders' perceptions of current organizational culture and the culture in which they feel they would be more effective. They are frustrated and feeling that they are not

achieving up to their potential due to what they perceive as limits imposed by their organizations' culture.

With these findings, however, several valid questions can be raised. For example, what is the relationship between subjective perceptions of individual effectiveness and overall organizational effectiveness? Should it be assumed that organizations are underperforming when it is discovered that prospective leaders feel they are not achieving up to their potential? These are complex questions that have been explored at length in the management literature with no widely accepted answers. What can be said based on the results of this study is that individuals with high potential, who are viewed as future leaders by their colleagues, feel that they are not able to contribute as much as they might due to organizational culture factors. This represents a "loss" to the organization, perhaps in productivity, or possibility, or both, whether or not it can be linked to a diminishment of overall organizational effectiveness.

Another more specific question of the findings might be: what might less Hierarchy culture type and more Adhocracy culture type mean operationally, in an individual library? The instrument employed in this study, the Competing Values Framework, could also be used to explore this question. The CVF is designed to be used as both a diagnostic tool and as a guide to an organizational culture change process. An organization using a CVF process would start with the diagnostic phase, described in this study, and then move to using the framework to identify desired changes in respect to

each culture type and come to agreement on what those changes meant in the context of that organization.[25] For example, an increase in the Adhocracy culture might mean greater openness to staff suggestions, more thoughtful risk taking; it would not imply everyone for him/herself, chaotic processes, or pursuing fads.[26]

While this paper does not include an analysis of the responses to the survey's open-ended questions, some light is shed on the question of operational significance by narrative responses to the questions about what libraries, as they look forward, might do more and less of (Appendix 1, Questions 5-7). Respondents who desired a shift of 30 or more points (i.e., percent) from a Hierarchy culture toward an Adhocracy culture pointed to what such a shift might mean in practice. One respondent noted, "People working in academic libraries need structured opportunities (and encouragement) to try things out (the "beta" or pilot project idea), and administrative support for doing so. [...] The culture of the library needs to be such that people don't automatically roll their eyes at experiments or constant change, but instead welcome new possibilities and want to try them out." Another respondent said, "It is time for more management shake-ups, the development of more flexible work situations, and more risk-taking. There needs to be more experimentation and room to explore different operational models more readily."

Numerous responses from those who sought a large shift from Hierarchy toward Adhocracy singled out the negative impact of consensus-based processes common in

libraries. One respondent noted, "I wonder what it is about the culture of librarianship that makes it more important to get along and play nice than it is to be effective." Another wrote, "Libraries need to get away from having to create a 80-page report that takes 1.5 years to come up on whether a 'Get it delivered' button should be implemented in the catalog." A consensus culture is most associated with the Clan culture type and no desire to shift away from Clan values was found in the Competing Values Framework questions in this study; in fact, in the management style dimension, an increase in Clan values was desired (see Figure 3). The question of the impact of Clan values, positive or negative, on current and potential effectiveness and capacity for change bears further investigation.

Even though the majority of respondents to this survey indicated that they intend to remain working in libraries, it might be unwise to feel too heartened by this finding. Several respondents specifically pointed to organizational culture issues as driving them to consider leaving: "I'm just not sure I want to stay in a library, or at least not one where there is little innovation or support for it" and "I am looking forward to younger people taking over. I thought that where I work now would be more progressive, but it is so traditional. And traditional no longer works in libraries." A number of people, in response to the question about what they think about when they consider their future in libraries, noted that they know they have attractive options outside libraries, even if they hope to stay in libraries. Instructional technology-related positions, in particular,

were cited by more than one respondent as an option. But it is also well known that several other fields (e.g., informatics, management information systems, data- and geospatial-oriented specialties) will vie for the same talent that libraries will increasingly need to move effectively into the future.

It may be tempting to dismiss the frustrations of future library leaders as generational differences or the unseasoned perspectives of potential leaders who have not yet carried the mantle of leadership. However, the data make a strong case for the fact that, if libraries are to remain important components of the academy, the current and next generation of library leaders face an imperative to change at a faster pace and more radically than did their predecessors. This study signals the undergirding importance of organizational culture development as a strategy to achieving greater library effectiveness and preparedness for the future.

Conclusion

Academic libraries, and research libraries in particular, have nurtured fundamentally conservative organizational cultures, mirroring their historical role in the academy. To some extent, libraries are constrained in their capacity to change by being part of this larger (conservative) university environment. As Michalko has noted, "The library as a separately identifiable organization is going to reproduce the same patterns of transformation that the larger institution is going through."[27] This presents a paradox

for libraries: they must aggressively change to remain viable entities with their constituents while at the same time continuing to be recognized and accepted within their universities.

At the same time, research libraries are microcosms of the university, with both business-focused and academic-focused functions. Also like universities, libraries are characterized by multiple, often quite distinct, subcultures. It is therefore likely that a given library's profile would contain a mix of two or more dominant cultural types. This challenges leadership to manage and, where desirable, cultivate distinct and potentially competing cultures within the library organization. Adding to this challenge is the need to align the overall library organizational culture with the culture of the parent institution to ensure stability, fit, and support.

Is an increased emphasis on nurturing the Adhocracy culture type the answer to these challenges emerging from the library's role within the larger organization? It can be argued that this culture type is better suited to the nature of the external pressures libraries currently face, namely rapid shifts in both the information environment and user expectations brought about by changes in information technology. In an Adhocracy culture the roles of *innovator* and *broker* are key.[28] Leaders who are innovators think creatively about opportunities and are not limited by current structures. They are effective in energizing people around a new vision of organizational opportunities. The leader as broker serves as a liaison between the organization and

those outside the organization. As Faerman notes, nurturing a positive image of the organization can help leaders garner additional resources,[29] a principal objective for library leadership when one views the library in the broader campus context.

Increasingly, organizational effectiveness may be tied to sustaining a continuous tempo of change, according to organizational researchers Weick and Quinn.[30] However, a common response to the need for significant change is to create (at significant effort) a monumental episode of change, that when completed is frozen, a new status quo. Significant change in a Hierarchy-dominant culture may tend to be approached this way. In fact, urgent calls for transformative change may reinforce and harden the tendencies towards Hierarchy approaches, as the need to make change happen is perceived to be possible only through centralized authority and control. This, however, does not advance an organization's ability and capacity to change as needed.

Alternatively, Weick and Quinn suggest developing a culture that has the capacity to support continuous change. "The distinctive quality of continuous change is the idea that small continuous adjustments, created simultaneously across units, can cumulate and create substantial change."[31] Organizations where this aspect of culture is strong are emergent and self-organizing and change is constant, improvisational, evolving, and cumulative. The ability of libraries to foster strong Adhocracy-type cultures that can readily adapt to changes in the environment, while continuing to maintain the control necessary to manage the organization's more routine processes, may be key to

continued success. This points to moving from a culture that is dominated by the Hierarchy culture type to one that has more elements of Adhocracy.

While libraries have grappled with environmental changes before, never before have the changes been so dramatic and so sweeping, as now. Current library leaders are faced with challenges never seen by their predecessors. Generational and technological changes portend a bleak future for libraries that do not dramatically realign their organizational cultures to address the changes. A key component of this will be creating an environment and culture in which staff that are demonstrating the kind of leadership necessary to continuously re-envision the library can thrive.

Endnotes

1. In later work on the Competing Values Framework, Cameron and Quinn added an orienting verb to describe each dominant culture type. They found that the verbs helped cue managers to the kinds of dominant activities that relate to value creation in each quadrant (i.e., culture type).[11] The verbs are included in Figure 1.

2. Taiga Forum Provocative Statements, March 10, 2006
http://www.taigaforum.org/documents/ProvocativeStatements.pdf

3. The Organizational Culture Assessment Instrument (OCAI) consists of a survey instrument that assesses six key dimensions of organizational culture: dominant characteristics, leadership, management, organization glue, strategic emphases, and criteria of success.[24] Since the OCAI questions correspond to the four quadrants of the CVF, the results can be graphed on the Competing Values Framework grid.

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31. Ibid., 375.

Appendix 1. Text of Survey.

Introduction

Welcome to our survey!

This survey is designed to better understand the attitudes of our future leaders. You have been identified as a future leader and, as such, your opinions are important for understanding the future of academic libraries.

Your responses will be confidential. Publications resulting from the research will present aggregate data. We will be presenting the results of this survey at the Fall ARL meeting. We know your time is valuable and this survey will take only about 10-15 minutes of your time. It contains a variety of question types but there are instructions on each page. The Institutional Review Board of North Carolina State University has approved this informed consent statement. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact [...], Regulatory Compliance Administrator, Box 7514, or [...], IRB Coordinator, Box 7514, North Carolina State University. Your participation is voluntary and you can stop the survey at any time by closing your browser.

By clicking on the "Next" button below, you agree that you have read and understood the above consent form and agree to participate in this study. At the end of the survey you will have the opportunity to submit an email address to be entered in a drawing for a $100 Amazon Gift Certificate. Your email will not be associated with your responses in any way.

Your participation is voluntary and you can stop the survey at any time by closing your browser.

By clicking on the "Next" button below, you agree that you have read and understood the above consent form and agree to participate in this study. At the end of the survey you will have the opportunity to submit an email address to be entered in a drawing for a $100 Amazon Gift Certificate. Your email will not be associated with your responses in any way.

If you have questions, please don't hesitate to contact any one of us:
Kristin Antelman
Kenning Arlitsch
John Butler
Kris Maloney

Section 1. Predicting the Future…

The Taiga Forum was a meeting first convened in 2005 to bring AULs together to talk about the future of libraries, recognizing that there was a need to "develop cross-functional vision that makes internal organizational structures more flexible, agile, and effective."

Although the questions were developed three years ago, we are interested in your thoughts on a few of them, whether you think each is likely or not likely to come to pass within five years.

1. ***In five years . . . all information discovery will begin at Google, including discovery of library resources. The continuing disaggregation of content from its original container will cause a revolution in resource discovery.***

   Likely ___ Unlikely___ Comment (optional):

2. ***In five years . . . a large number of libraries will no longer have local OPACs. Instead, we will have entered a new era of data consolidation (either shared catalogs or catalogs that are integrated into discovery tools), both of our catalogs and our collections. The ERM and the ILS will be one and the same and discovery will be outsourced.***

   Likely ___ Unlikely____ Comment (optional):

3. ***In five years . . . libraries will provide shared curation services for important portions of the cultural, scholarly, historic and institutional record. This will move from ad hoc, suboptimal project to a collaborative strategy, to a shared approach.***

Likely ___ Unlikely____ Comment (optional):

Section 2. The Changing Role of the Library…

We are interested in your thoughts on how well academic research libraries are responding to the changing environment.

4. **Academic research libraries are effectively meeting the needs of their users…**
   strongly agree ___ agree___ neutral___ disagree___ strongly disagree ___

If you would like to tell us more -- the following are some optional questions that will help us interpret your response.

5. **What should academic research libraries be focusing on less, or differently?**

6. **What are academic research libraries not doing, or not doing enough?**

7. **What are some things that academic research libraries are doing well?**

Section 3. Your Library's Culture…

We are interested in learning how you perceive your library's current organizational culture as well as your ideas of a preferred organizational culture for your library. Because it is very unlikely that any organization can be categorized into a single box, the following question allows you to describe the degree to which your organization matches each of the idealized descriptions.

In each of the questions below there are four descriptions of academic libraries. None of the descriptions is any better than the others; they are just different.

Please **distribute 100 points among the four descriptions A, B, C and D** giving higher scores to the descriptions that best answer the question.

8. **The CURRENT organizational culture (distribute 100 points):**

   A. My current library is a very personal place. It is like an extended family. People seem to share a lot of themselves. _____

B. My current library is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks. _____

C. My current library is a very formalized and structured place. Policies and procedures generally govern what people do. _____

D. My current library is very competitive in orientation. A major concern is with getting the job done. People are very production oriented. _____

9. **Your PREFERRED organizational culture (distribute 100 points):**

A. My preferred library is a very personal place. It is like an extended family. People seem to share a lot of themselves. _____

B. My preferred library is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks. _____

C. My preferred library is a very formalized and structured place. Policies and procedures generally govern what people do. _____

D. My preferred library is very competitive in orientation. A major concern is with getting the job done. People are very production oriented. _____

Section 4. Your Preferences and Experience…

We are interested in hearing about your preferred leadership style, your values and your experience in your work environment.

The format of this question is the same as the previous question but this question is about management style. Because it is very unlikely that the management style of any organization can be categorized into a single box, the following question allows you to describe the degree to which the management style of your library matches each of the idealized descriptions.

In each of the questions below there are four descriptions of management styles in academic libraries. None of the descriptions is any better than the others; they are just different.

Please **distribute 100 points among the four descriptions A, B, C and D** giving higher scores to the descriptions that best answer the question.

10. **The CURRENT management style (distribute 100 points):**

A. The current management style in my library is characterized by teamwork, consensus, and participation. ____

B. The current management style in my library is characterized by individual risk taking, innovation, freedom, and uniqueness. _____

C. The current management style in my library is characterized by hard-driving competitiveness, high demands, and achievement. _____

D. The current management style in my library is characterized by security of employment, conformity, predictability, and stability of relationships. _____

11. **My PREFERRED management style (distribute 100 points):**

A. The current management style in my library is characterized by teamwork, consensus, and participation. ____

B. The current management style in my library is characterized by individual risk taking, innovation, freedom, and uniqueness. _____

C. The current management style in my library is characterized by hard-driving competitiveness, high demands, and achievement. _____

D. The current management style in my library is characterized by security of employment, conformity, predictability, and stability of relationships. _____

12. **To what extent do you feel that your library's organizational structures and processes limit your impact or effectives?**

not at all ___ somewhat ___ a lot ___

Section 5. Your future in libraries…

We would like to get some information about our future leaders' career plans.

13. **How likely is it that you will be working in a library in 5 years?**

very likely ___ likely ___ uncertain ___ unlikely ___ very unlikely ___

14. **How likely is it that you will be interested in moving into a higher level leadership position in the next 5 years?**

very likely ___ likely ___ uncertain ___ unlikely ___ very unlikely ___

If you would like to tell us more -- the following question will help us interpret your response.

15. **What are some of the things you think about as you look towards your own future in libraries?**

Information about you…

To better analyze the results, we would like to get some information about you. We are asking for just enough information to analyze the results. We will only report collective results; this information will not be reported by individual. We will not report results in a way that will allow a person's identity to be known.

What is the area of your current position?

- Collections
- Liaison/Subject Specialist (collections, services, instruction)
- Public Services
- Special Collections/Archives
- Technical Services
- Technology
- Other (please specify)

What is your position level?

- Department Head
- Coordinator

- Unit Head
- Librarian
- Other (please specify)

How long have you worked in libraries?

- 0-5 years
- 6-10 years
- more than 10 years

How long have you been in your current position?

- 0-5 years
- 6-10 years
- more than 10 years

In which age range are you?

- Under 30
- 30-35
- 36-40
- 41-45
- 46-50
- 51-55
- older than 55

What is your gender?

- Male
- Female

Please answer the following:

- Have you played a significant role in a **long-term** planning effort such as a strategic planning process or planning for a new direction for your library (that represented a significant shift in investment or priorities)?
- Have you played a significant role in conceiving of or implementing a new library service?
- Have you been given additional responsibility in your current position?
- Have you played a significant role in a grant funded project?
- Have you ever been promoted?
- Have you been nominated for a leadership institute or program?
- Have you given a presentation, presented a poster or had an article accepted within the last year?
- Do you regularly maintain a web page, blog or other form of web-based communication?

Appendix 2. Text of Email Invitation.

Dear Future Library Leader,

You have been identified by one of your peers as a future leader in the profession. The four of us are currently participating in a leadership program, the Association of Research Libraries Research Library Leadership Fellows Program, and our participation in that program has led us to want to learn more about what future leaders are thinking.

In this survey, we ask for your thoughts about how well your own library, as well as libraries in general, are positioned for change, how you think we can better respond to the needs of our institutions and library users, and how you see your own future in the profession. We will present the results of this study at the ARL fall membership meeting in Washington, D.C. All responses are anonymous.

We realize that you are busy and so we have designed the survey to take no more than 10-15 minutes of your time. To help thank you for your participation, we are offering the opportunity to submit your email for a drawing to receive a $100 Amazon gift certificate.

The survey can be found here: https://www.surveymonkey.com/[...]

Thank you in advance for your participation,

Kristin Antelman, North Carolina State University

Kenning Arlitsch, University of Utah

John Butler, University of Minnesota

Kris Maloney, Georgetown University

UU IR Author Manuscript

Appendix 3. **Results of Post-hoc Tests Describing Differences Between Group Pairs.**

Multiple Comparisons

Current Dominant Characteristics: Adhocracy

(I) Thwarted	(J) Thwarted	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
not at all	somewhat	15.42*	3.213	.000	7.32	23.52
	a lot	26.63*	3.190	.000	18.57	34.69
somewhat	not at all	-15.42*	3.213	.000	-23.52	-7.32
	a lot	11.21*	2.048	.000	6.26	16.17
a lot	not at all	-26.63*	3.190	.000	-34.69	-18.57
	somewhat	-11.21*	2.048	.000	-16.17	-6.26

Based on observed means.

The error term is Mean Square(Error) = 164.289.

*. The mean difference is significant at the .05 level.

Multiple Comparisons

Current Dominant Characteristics: Hierarchy

(I) Thwarted	(J) Thwarted	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
not at all	somewhat	-20.32*	3.290	.000	-28.38	-12.26
	a lot	-31.96*	4.045	.000	-41.85	-22.07
somewhat	not at all	20.32*	3.290	.000	12.26	28.38
	a lot	-11.64*	4.061	.015	-21.49	-1.78
a lot	not at all	31.96*	4.045	.000	22.07	41.85
	somewhat	11.64*	4.061	.015	1.78	21.49

Based on observed means.

The error term is Mean Square(Error) = 479.361.

*. The mean difference is significant at the .05 level.

Multiple Comparisons

Current Management Style: Adhocracy

(I) Thwarted	(J) Thwarted	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
not at all	somewhat	10.74*	2.361	.000	5.16	16.32
	a lot	19.13*	2.505	.000	13.21	25.06
somewhat	not at all	-10.74*	2.361	.000	-16.32	-5.16
	a lot	8.39*	1.677	.000	4.43	12.36
a lot	not at all	-19.13*	2.505	.000	-25.06	-13.21
	somewhat	-8.39*	1.677	.000	-12.36	-4.43

Based on observed means.

The error term is Mean Square(Error) = 94.903.

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Current Management Style: Hierarchy

(I) Thwarted	(J) Thwarted	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
not at all	somewhat	-17.48*	5.240	.003	-29.88	-5.09
	a lot	-36.50*	5.560	.000	-49.65	-23.35
somewhat	not at all	17.48*	5.240	.003	5.09	29.88
	a lot	-19.02*	3.722	.000	-27.82	-10.22
a lot	not at all	36.50*	5.560	.000	23.35	49.65
	somewhat	19.02*	3.722	.000	10.22	27.82

Based on observed means.

The error term is Mean Square(Error) = 467.434.

*. The mean difference is significant at the 0.05 level.